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Local Transmission of *Plasmodium vivax* Malaria — Virginia, 2002

Malaria transmission in the United States was largely eliminated during the mid-20th century; however, sporadic cases of locally acquired mosquito-transmitted malaria continue to occur. Since 1997, four separate probable mosquito-transmitted malaria outbreaks have been reported to CDC, including one from Virginia (*1–3*). This report describes the investigation of two cases of *Plasmodium vivax* malaria that occurred in northern Virginia in August 2002, and underscores the need for clinicians to consider the possibility of malaria in patients with fever of unknown origin.

Case Reports

Case 1. On August 23, 2002, a person aged 19 years from northern Virginia sought medical care at a family health clinic with a 4-day history of fatigue, fever, and chills. The patient also complained of muscle aches and sinus pain. A sinus infection was diagnosed, and the patient was prescribed azithromycin and desloratadine. Four days later, the patient returned to the clinic with additional symptoms, dizziness, and nausea. On physical examination, the patient had a temperature of 103.5° F (39.7° C) and tachycardia. Laboratory results revealed pancytopenia (platelet count: 61,000/μL [normal: 130,000–400,000/μL], hemoglobin: 10 g/dL [normal: 11.5–16.0 g/dL], and white blood cell count: 3,300/μL [normal: 4,000–11,000/μL]). The patient's therapy was changed to oral levofloxacin. Malaria parasites were identified subsequently on a routine complete blood count smear taken 4 days after the initial clinic visit. The patient was contacted and administered chloroquine. A review of the initial malaria smear by a local university hospital confirmed the diagnosis of *P. vivax* malaria. The patient completed a 3-day course of chloroquine therapy and after a normal glucose-6-phosphate dehydrogenase (G6PD) test result was placed on primaquine for 14 days. The patient had complete resolution of symptoms.

Case 2. On August 25, a person aged 15 years from northern Virginia was taken to a local emergency department for treatment of 2 weeks of headaches and 4 days of fever, nausea, vomiting, malaise, and nose bleeds. On physical examination, the patient had a temperature of 105.0° F (40.6° C), tachycardia, splenomegaly, and jaundice. Laboratory values revealed pancytopenia (platelet count: 48,000/μL, hemoglobin: 11.6 g/dL, and white blood cell count: 3,200/μL). A malaria smear revealed *Plasmodium* sp. parasites reported initially as nonfalciparum. The patient was admitted to the hospital and administered quinine and clindamycin. The smear was confirmed subsequently as *P. vivax* by the Virginia Department of Health. The patient's physician contacted CDC for treatment recommendations on August 28 because the patient had tinnitus, requiring discontinuation of the quinine. The patient completed a 3-day course of chloroquine therapy and was discharged with complete resolution of symptoms on August 31. After a normal G6PD test result, the patient was placed on primaquine for 14 days.

Epidemiologic Investigation

The two patients had no risk factors for malaria, including international travel, blood transfusion, organ transplantation,

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or needle sharing. The patients lived approximately 0.5 miles apart; however, the 19-year-old patient reported numerous visits to friends who lived directly across the street from the 15-year-old patient. Residents in the neighborhood surrounding the patients' homes were asked about recent febrile illnesses. Medical records from two hospitals serving residents in the patients' neighborhood also were reviewed, and charts of patients with a diagnosis of fever of unknown origin were obtained. None of the patients' neighbors had unexplained febrile illnesses. Of 224 hospital records available for review, 21 documented fever with no underlying cause. One of the 21 patients had persistent symptoms; however, a malaria smear did not reveal malaria parasites. No further cases of locally acquired malaria have been reported in northern Virginia.

Washington Dulles International Airport is located <10 miles from the patients' homes. The airport receives nonstop international flights from countries in which *P. vivax* malaria is endemic. Ill travelers are sent to one of the hospitals included in the investigation's case-detection activities. Physicians at two Army bases located nearby were contacted and reported no known cases of malaria or fever of unknown origin in troops returning from areas in which malaria is endemic.

Environmental and Entomologic Investigation

The patients' homes were visited. One home had several unscreened or poorly screened windows; the other had well-screened windows and a porch. Within the vicinity of both homes was a wooded area with a creek and ponds. As a part of ongoing West Nile virus (WNV) surveillance activities, trapping for anopheline mosquitoes within 10 miles of the patients' homes yielded *Anopheles quadrimaculatus* and *An. punctipennis* (Figure). Of approximately 870 anopheline mosquitoes tested, five pools (four to six mosquitoes per pool) captured within 2–6 miles of the patients' homes tested positive for *P. vivax*-210 circumsporozoite protein by using a field test (VecTest™ [Medical Analysis Systems, Inc., Camarillo, California]) on September 25 and 27 and October 1, 6, and 11. No mosquito pool has tested positive repeatedly in confirmatory testing by using polymerase chain reaction (PCR); however, efforts to confirm the positive VecTest™ mosquito pools are ongoing.

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FIGURE. CDC light trap used during investigation to capture *Anopheles* sp. mosquitoes

Photo/CDC

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Editorial Note: Despite malaria eradication certification in the United States in 1970 (*4,5*), 10 outbreaks involving 17 cases of probable locally acquired mosquito-borne malaria transmission have occurred since 1992 (*1*). The two cases from northern Virginia represent the first cases of probable mosquito-borne malaria transmission in the United States since 1999 (*1,2*) and the second reported outbreak in Virginia (*3*). These outbreaks share common features: 1) an initial case without known risk factors for malaria, 2) probable proximity to a person with malaria parasitemia, 3) presence of competent mosquito vectors, and 4) environmental conditions conducive to the maturation of the parasite in the mosquito.

Approximately 1,000–1,500 cases of malaria in the United States are reported annually to CDC (*6*). The majority are diagnosed in travelers from countries in which malaria is endemic. The source of infection in the two northern Virginia residents was probably the bite of an infective mosquito that had acquired the parasite by biting a malaria-infected person in the general vicinity. Several *Anopheles* sp. mosquitoes native to the United States are competent malaria vectors. The *An. quadrimaculatus* and *An. punctipennis* mosquitoes captured near the patients' homes have been implicated in previous cases of locally acquired malaria (*2,3*). Numerous pools of these vectors were tested by using VecTest™. Although this test is used commonly in international settings (*7*), this is the first time the test has been used in an investigation of mosquito-borne malaria in the United States. The identification of five malaria-positive pools among approximately 870 tested mosquitoes is unexpectedly high and has not been observed previously during an investigation of a malaria outbreak in the United States. Rapid screening tests such as the VecTest™ were not available previously. However, because VecTest™ is a new tool for the investigation of local mosquito-borne malaria in the United States, its validity in this setting is unknown, and results need to be confirmed by using PCR. Efforts are under way to develop testing algorithms for screening mosquito pools by using VecTest™ and confirming results with PCR.

This investigation underscores the need for clinicians to consider the possibility of malaria in patients with fever of unknown origin. Although a thorough travel history and risk-factor assessment should be a part of the evaluation of febrile patients, the possibility of malaria in patients without international travel, blood transfusion, organ transplantation, or needle sharing should be considered. Rapid diagnosis and treatment with effective antimalarial drugs are the basis of patient case management and will reduce the chances that an infected host will transmit the parasite. The same precautions recommended for minimizing exposure to WNV should be followed for reducing exposure to malaria-infected *Anopheles* sp. mosquitoes, including wearing long-sleeved shirts and long trousers, using insect repellent containing N,N-diethylm-toluamide (DEET), and avoiding outdoor activities during the late evening. Prompt reporting of patients with malaria to local public health authorities assists in activating control measures for these isolated cases of mosquito-borne malaria.

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Q Fever — California, Georgia, Pennsylvania, and Tennessee, 2000–2001

Q fever is a zoonotic disease caused by the bacterium *Coxiella burnetii*. The most common reservoirs are domesticated ruminants, primarily cattle, sheep, and goats. Humans acquire Q fever typically by inhaling aerosols or contaminated dusts derived from infected animals or animal products. Its highly infectious nature and aerosol route of transmission make *C. burnetii* a possible agent of bioterrorism (*1*). Although up to 60% of initial infections are asymptomatic (*2*), acute disease can manifest as a relatively mild, self-limited febrile illness, or more moderately severe disease characterized by hepatitis or pneumonia. It manifests less commonly as myocarditis, pericarditis, and meningoencephalitis. Chronic Q fever occurs in <1% of infected patients, months or years after initial infection. Chronic disease manifests most commonly as a culture-negative endocarditis in patients with valvular heart disease. During 2000–2001, a total of 48 patients who met the case definition* of Q fever were reported to CDC. This report describes the case investigations for six of these patients, which indicate that these persons acquired Q fever probably through direct or indirect contact with livestock. To enhance surveillance efforts, health-care providers should report cases of Q fever to state health departments.

California

In May 2001, a woman aged 56 years sought treatment from her health-care provider for fever (104° F [40° C]), hepatomegaly, and elevated liver enzymes (alkaline phosphatase 532 U/L [normal: 30–100 U/L], SGOT 178 U/L [normal: 9–25 U/L], and SGPT 149 U/L [normal: 7–30 U/L]). Acute cholecystitis was diagnosed, and a cholecystectomy was performed. After the procedure, the patient's symptoms persisted, and she developed pain and partial paralysis of the left leg. Approximately 4 weeks after the woman sought treatment initially, a computed tomography (CT) scan of the patient's chest revealed nonspecific interstitial lung disease. Serum samples obtained near the time of the CT scan and 6 weeks later were tested by an indirect immunofluoresence antibody (IFA) assay and demonstrated IgG antibodies reactive with *C. burnetii* phase II antigens at reciprocal titers of ≥1,024, confirming a diagnosis of Q fever. The patient's husband aged 62 years also developed a nonspecific febrile illness 3 days after the onset of his wife's illness; serum specimens obtained from him in June and July and tested by IFA demonstrated IgG antibodies reactive with *C. burnetii* phase II antigens at reciprocal titers of ≥1,024. Canvassing of the neighborhood by a public health nurse revealed that a next-door neighbor aged 76 years had a nonspecific febrile illness in April 2001. His serum was obtained in August and October and was tested by IFA; both specimens demonstrated IgG antibodies to *C. burnetii* phase II antigens at reciprocal titers of ≥1,024. The three patients were treated with doxycycline; their symptoms resolved, but the woman has residual neurologic deficits in her left leg.

The couple did not own livestock but drove daily on an unpaved road past a neighbor's goat herd. Goat kids had been born at the farm during the spring. Serum specimens obtained from 48 goats in this herd were tested by CDC by using IFA; 45 (94%) animals had IgG antibodies to *C. burnetii* at reciprocal titers indicative of current or previous infection (titer range: 32–16,384).

Georgia

In March 2001, a man aged 46 years sought treatment for acute onset of fever, chills, cough, and weight loss; influenza was diagnosed. The patient's symptoms persisted, and after 2 weeks he sought further treatment at an emergency department, where influenza again was diagnosed, and he was referred to an infectious disease specialist. A serum sample was tested by IFA and reacted with *C. burnetii* phase II antigens at a reciprocal titer of ≥256. The patient was administered a 5-day course of the fluoroquinolone gatifloxacin, and symptoms resolved within 2 weeks. A convalescent-phase serum sample obtained in April and tested by IFA demonstrated an IgG reciprocal antibody titer reactive with *C. burnetii* phase II antigens of ≥16,384.

The patient owned several dairy cows, but there had been no recent animal births on the premises. Two beef cattle herds of approximately 35 animals each were pastured across the road from the patient's farm. Serum was drawn from 14 cattle from these herds; two animals tested by IFA reacted with phase I or II antigens of *C. burnetii* at reciprocal antibody titers (16–32).

Pennsylvania

In September 2000, a man aged 90 years sought treatment for fever (101.0° F [38.3° C]) and a 4-month history of malaise and weight loss after a cholecystectomy. The patient had elevated liver enzymes (alkaline phosphatase 181 U/L

* *Confirmed Q fever:* A clinically compatible case that is laboratory confirmed with one of the following: 1) a fourfold change in antibody tier to *C. burnetii* antigen by immunofluoresence antibody assay or complement fixation antibody test, 2) a positive polymerase chain reaction assay, 3) culture of *C. burnetii* from a clinical specimen, or 4) positive immunostaining of *C. burnetii* in tissue. *Probable Q fever:* a clinically compatible case with single supportive IgG of IgM titer as defined by the testing laboratory.

[normal: 45–115 U/L] and SGOT 51 U/L [normal: 1–40 U/L]). He was admitted to the hospital for diagnostic evaluation. In 1998, the patient had undergone aortic valve replacement for culture-negative endocarditis and valvular insufficiency. A serum sample drawn in November 2000 was tested by IFA and demonstrated IgG antibodies reactive with *C. burnetii* phase I antigens at a reciprocal titer of ≥524,288. Presence of *C. burnetii* was demonstrated in the excised aortic heart valve tissue from 1998 when tested by immunohistochemical (IHC) staining at CDC. The patient was started on long-term doxycycline therapy in October 2000. Since electing to discontinue this therapy 1 year later, the patient has had two recurrences. He was admitted to the hospital in September 2002 for fever and hypotension.

The patient had owned and operated a cattle farm but had retired from farming 30 years previously. The patient's relatives raised sheep and goats nearby, but the patient denied having contact with their animals. One relative, who raised sheep, was found to have an antibody titer reactive with *C. burnetii* phase I antigens but had not experienced illness.

Tennessee

In February 2001, a man aged 49 years was admitted to a hospital with a right lower-extremity embolism. The patient reported a 6-month history of intermittent fever, night sweats, fatigue, and arthralgias. A heart murmur had been diagnosed 4 months previously. On admission, he had a temperature of 99.2° F (37.3° C) and leukocytosis (white blood cell count of 14.3×10^9/L [normal: $4.5–11.0 \times 10^9$/L]). The embolism in his leg was removed surgically. An echocardiogram after hospital admission revealed a bicuspid aortic valve with moderate stenosis and severe regurgitation, and aortic valve replacement was performed. Microscopic examination of the excised valve revealed a vegetative growth, but no bacteria or fungi were detected by histopathology or routine cultures. Serum obtained 1 week after admission was tested by IFA and demonstrated IgG antibodies reactive with *C. burnetii* phase I antigens at a reciprocal titer of ≥512, and the patient was administered doxycycline and levofloxacin. CDC detected DNA of *C. burnetii* in the excised aortic valve by polymerase chain reaction (PCR). The embolus removed from the patient's right leg tested positive for *C. burnetii* by IHC staining. The patient was discharged but was readmitted 10 days later for pericardial effusion with tamponade, which resolved after surgical intervention.

The patient owned one goat and a herd of approximately 100 cattle. In February 2000, the patient had been present at the stillbirth of one calf and the premature delivery and death of a second calf. Serum samples from 24 cattle in his herd were collected in July and tested for antibodies to *C. burnetii* by IFA; one animal had reactivity to phase I and II antigens at a reciprocal titer of 16.

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Editorial Note: These cases demonstrate acute and chronic clinical characteristics of Q fever and indicate some of the risk factors for acquiring this disease (see box). The bacterium *C. burnetii* is distributed widely in the United States, and human cases of Q fever have been reported from almost every state (*3*). Human infections are associated commonly with exposure to infected animals giving birth, especially ruminants such as sheep, cattle, and goats. Cats, dogs, wildlife, and birds also are associated occasionally with human infection (*3,4*). Transmission to humans usually occurs by inhalation of droplets or windborne dust containing *C. burnetii* (*2–4*). The persons whose cases are described in this report acquired Q fever probably through exposure to infected livestock. Most of the six patients had occupational contact with livestock (e.g., farming); however, some of these cases demonstrate that persons need not work in a high-risk environment or have direct animal contact to become infected with *C. burnetii*.

In humans, the clinical presentation of Q fever varies widely. Acute Q fever might be characterized by a nonspecific febrile illness, hepatitis, or pneumonia (*5*). Acute cholecystitis is not known to be associated with *C. burnetii* infection; however, the liver manifestations observed in some patients might resemble gall bladder disease. Although one person described in this report had a peripheral neuropathy after acute infection, such symptoms are uncommon (*6*). Chronic Q fever might manifest months to years after initial infection, most commonly as a culture-negative endocarditis (*7–9*). Persons with underlying heart valve defects or prosthetic valves are at increased risk for chronic Q fever endocarditis, which might occur in up to 40% of persons with valvular heart disease following acute Q fever (*9*). Health-care providers should be aware of the signs and symptoms of the disease and consider laboratory testing for Q fever in patients exhibiting prolonged fever, hepatitis, atypical pneumonia, or blood culture–negative endocarditis, particularly patients whose histories suggest contact with or exposure to sheep, goats, or cattle.

BOX. Epidemiology, diagnosis, treatment, and prevention of Q fever

Epidemiology

- Classified as a zoonotic disease
- Contracted through exposure to infected ruminants (especially parturient goats, sheep, and cattle), with incubation time of 3–30 days
- Distributed broadly throughout the United States
- Transmitted primarily through inhalation of airborne bacteria
- Highly infectious
- Designated a possible bioterrorism agent

Clinical findings

- Up to 60% of infections are asymptomatic
- Acute disease is characterized most frequently by
  - — High fever and headache
  - — Pneumonia or hepatitis in approximately 60% of acutely ill persons
  - — Infrequent acute manifestations including pericarditis, myocarditis, or meningoencephalitis
- Chronic disease occurs in <1% of infected patients
  - — Occurs predominantly in patients with underlying valvular heart disease, vascular aneurysms, or vascular grafts
  - — Manifests primarily as culture-negative endocarditis, less commonly as vascular or osteoarticular infection

Laboratory testing

- Diagnosis made by
  - — Demonstration of fourfold or greater changes in IgG or IgM class-specific testing of paired acute- and convalescent-phase serum samples by immunofluoresence antibody
  - — Elevated antibody response to *C. burnetii* phase I or II antigens
  - — Detection of *C. burnetii* by polymerase chain reaction or immunohistochemical staining

Treatment

- Acute disease
  - — Doxycycline 200 mg/day for 2–3 weeks
- Acute disease in patients with valvular heart disease
  - — Doxycycline 200 mg/day plus hydroxychloroquine 600 mg/day, for 1 year; dosage of hydroxychloroquine adjusted to maintain plasma level at 1± 0.2 μg/ml
- Chronic
  - — Doxycycline and hydroxychloroquine, dosage as above, for 1.5–3 years; cessation of therapy determined by appropriate serologic profile

Prevention

- Minimize or restrict exposures to livestock birthing areas
- Dispose of birth products properly (e.g., incinerate placenta and aborted fetuses)
- Report all human cases to state health departments (Q fever is a nationally notifiable disease)

Q fever usually is diagnosed by evaluating paired acute- and convalescent-phase serum samples. In humans, the antibody response is directed against phase I and phase II antigens of *C. burnetii*. Patients with acute Q fever typically produce an antibody response primarily to *C. burnetii* phase II antigen; chronic *C. burnetii* infections typically elicit a higher antibody response to phase I antigens (*10*). A diagnosis of Q fever also can be confirmed by examining biopsies of affected organs by using PCR or IHC. Serologic tests may be conducted at commercial laboratories, several state health laboratories, or CDC. In animals, serologic tests for antibodies to *C. burnetii* are more difficult to interpret. Presence of antibodies might indicate previous infection with the organism but cannot be used to predict human risk (*3*).

For treatment of acute Q fever, doxycycline is the drug of choice. Initiation of therapy is warranted in patients with disease demonstrating clinical and epidemiologic features compatible with Q fever. Because antibiotic treatment is most effective during the early phase of the illness, treatment should not be withheld pending results of confirmatory laboratory antibody tests, which provide a retrospective diagnosis (*2*). For patients with pre-existing valvular disease, progression of acute disease to endocarditis is best prevented by combination long-term therapy with doxycycline and hydroxychloroquine. This regimen also is recommended for patients with active Q fever endocarditis (*2,9*). If the infection does not resolve with antibiotic therapy, the patient might require excision and replacement of the damaged heart valve; however, this will not necessarily ensure elimination of *C. burnetii*, and the new valve might fail if appropriate antimicrobial treatment is not initiated or is withdrawn prematurely (*5*).

Because its highly infectious nature and aerosol route of transmission make *C. burnetii* a potential agent of bioterrorism, human Q fever became a nationally notifiable disease in 1999. State health departments should report cases to CDC through the National Electronic Telecommunications System for Surveillance (NETSS) via event code 10255; to facilitate case reporting, Q fever case report forms are available at http://www.cdc.gov/ncidod/dvrd/qfever/case_rep_fm.pdf. Additional information about Q fever is available at http://www.cdc.gov/ncidod/dvrd/qfever.

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Probable Variant Creutzfeldt-Jakob Disease in a U.S. Resident — Florida, 2002

On April 18, 2002, the Florida Department of Health and CDC announced the occurrence of a likely case of variant Creutzfeldt-Jakob disease (vCJD) in a Florida resident aged 22 years. This report documents the investigation of this case and underscores the importance of physicians increasing their suspicion for vCJD in patients presenting with clinical features described in this report who have spent time in areas in which bovine spongiform encephalopathy (BSE) is endemic.

In early November 2001, the patient sought medical care for depression and memory loss that adversely affected the patient's work performance. The primary-care physician referred the patient to a psychologist. In early December 2001, the patient received a traffic ticket for failing to yield the right of way. In mid-December 2001, the patient had involuntary muscular movements, gait changes, difficulty dressing, and incontinence. In January 2002, the patient was evaluated in a local emergency department for these symptoms. A computerized tomography scan of the head revealed no abnormalities; a panic attack was diagnosed, and the patient was treated with an anti-anxiety medication.

In late January 2002, the patient's mother, a resident of the United Kingdom, took the patient to England, where medical evaluations were conducted during the next 3 months. During this period, the patient's memory loss and other neurologic symptoms worsened. The patient experienced falls with minor injuries, had difficulty taking a shower and dressing, and was unable to remember a home telephone number or to make accurate mathematical calculations. The patient subsequently became confused, hallucinated, and had speech abnormalities with lack of content, bradykinesia, and spasticity. The patient was referred to a neurologist, who suspected vCJD and subsequently referred the patient to the National Prion Clinic in the United Kingdom.

Medical evaluations at the National Prion Clinic included an electroencephalogram (EEG), which revealed a normal alpharhythm, and magnetic resonance imaging (MRI) studies, which revealed signal abnormalities in the pulvinar and metathalamus region that were suggestive of vCJD. The patient had a tonsil biopsy, and a Western blot analysis of the biopsy tissue demonstrated the presence of protease-resistant prion protein (PrP-res) with the characteristic pattern of vCJD; an immunohistochemical test for PrP-res also supported a diagnosis of vCJD. Analysis of the prion protein gene detected no mutation and showed methionine homozygosity at codon 129, consistent with all 105 vCJD patients tested in the United Kingdom (R. Will, Western General Hospital, Edinburgh, Scotland, personal communication, 2002).

The patient received experimental treatment with quinacrine for 3 months. As of late September 2002, the patient had become bedridden, experienced considerable weight loss requiring surgical insertion of a feeding tube, and was no longer communicating with family members. On the basis of a case definition developed in the United Kingdom, the patient's illness met criteria for a probable case of vCJD (*1*).

The patient was born in the United Kingdom in 1979 and moved to Florida in 1992. The patient never had donated or received blood, plasma, or organs and never had received human growth hormone. There was no family history of CJD. In October 2001, before the onset of the illness, the patient's wisdom teeth were extracted, but there was no history of major surgery.

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Editorial Note: Variant CJD was first reported in 1996 in the United Kingdom, where an outbreak of BSE had been occurring among cattle since the early 1980s (*2*). Strong laboratory and epidemiologic evidence indicates that vCJD is linked causally with BSE (*3*). Although specific foods that transmit the BSE agent to humans have not been identified, transmission is believed to occur primarily by processed food items that contain infectious bovine tissues such as the brain or spinal cord. As of early October 2002, a total of 138 vCJD cases were reported worldwide, including the case described in this report. Consistent with the conclusion that the agent of BSE is also the agent responsible for vCJD, most vCJD cases (n=128) were reported in the United Kingdom, where most BSE cases in cattle have occurred (*1*).

The patient described in this report represents the first probable vCJD case in a U.S. resident. The patient had grown up in the United Kingdom when the BSE outbreak was increasing and when the risk for human exposures to BSE was probably at its peak. Therefore, it is likely that this patient was exposed to the BSE agent one or more times during 1980–1992 before moving to the United States and that the interval between the patient's exposure to BSE and onset of illness was 9–21 years. Such an incubation period would be consistent with known incubation periods for other similar diseases in humans, such as kuru and CJD related to exposures to pituitary-derived human growth hormone (*4*).

The patient is unlikely to have transmitted the disease to others because the patient did not have surgical procedures that involved manipulation of known infectious tissues. In addition, the disease is not communicable by usual personal contact. Appropriate infection-control procedures should be followed while performing invasive procedures in patients with vCJD (*5*). Although concerns exist about possible transmission of vCJD by transfusion of blood, this risk remains theoretical. The patient never had donated blood or organs. In 1999, because of the theoretical possibility of vCJD transmissions from infected blood donors, blood collection agencies in the United States began implementing a donor-deferral policy to exclude donors who might be at increased risk for infection because of a history of ≥6 months (later changed to ≥3 months) residence or travel to the United Kingdom during 1980–1996. In 2001, this donor-deferral policy was expanded to exclude donors who have traveled to other European countries for an extended period of time since 1980 (*6*).

Compared with the classic form of CJD endemic in the United States (*7*), vCJD patients typically have illness onset at an unusually young age (median age: 26 years versus approximately 68 years for classic CJD). All but one of the reported vCJD decedents had illness onset and died before age 55 years, compared with approximately 10% of classic CJD cases (*7,8*). Early in the course of the disease, vCJD patients usually have early and persistent psychiatric symptoms, including anxiety, depression, and social withdrawal; persistent painful sensory symptoms with dysesthesia and/or parasthesia also have been reported (*8*). Evaluation of the clinical manifestations of the first 100 vCJD patients in the United Kingdom indicated that onset of frank neurologic signs (e.g., gait disturbances, slurring of speech, and tremor) was usually delayed by several months after illness onset. Other neurologic signs (e.g., chorea, dystonia, and myoclonus) frequently developed late in the course of the illness (*8*). A prominent, symmetrical pulvinar high signal on T2-weighted and/or proton-density–weighted MRI has been reported in most vCJD patients (*9*). In the absence of any other more plausible explanation, patients showing these clinical and radiologic features should be investigated for vCJD. In such patients, a history of travel to a BSE-endemic area increases the clinical suspicion for vCJD. In vCJD, but not other forms of CJD, there is prominent involvement of the lymphoreticular tissues (*10*). A tonsil biopsy with demonstration of a characteristic abnormal prion protein by Western blot and immunohistochemistry can help establish a diagnosis of vCJD. The EEG in vCJD patients is typically normal or shows nonspecific abnormalities. All 105 vCJD patients tested in the United Kingdom were homozygous for methionine at the polymorphic codon 129 of the prion protein gene (R. Will, Western General Hospital, Edinburgh, Scotland, personal communication, 2002). The possible benefits of treating classic CJD and vCJD patients with quinacrine are under evaluation.

Physicians should report suspected vCJD cases to their local and state health departments. Because the clinical manifestations and age distribution of vCJD patients can overlap with those of classic CJD patients, a brain autopsy should be conducted in all such cases to distinguish suspected or diagnosed vCJD from classic CJD. A neuropathologic evaluation, in addition to helping to confirm the diagnosis, would help identify other potentially emerging prion diseases in humans. To facilitate neuropathologic studies of suspected or diagnosed prion diseases in humans, CDC, in collaboration with the

American Association of Neuropathologists, established the National Prion Disease Pathology Surveillance Center. Physicians are encouraged to use the free services of this pathology center to confirm the diagnosis in suspected vCJD or classic CJD patients. Information about the center is available at http://www.cjdsurveillance.com.

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West Nile Virus Activity — United States, October 10–16, 2002, and Update on West Nile Virus Infections in Recipients of Blood Transfusions

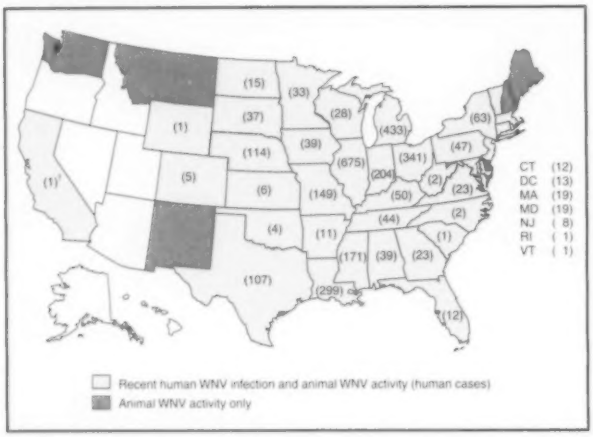
This report summarizes West Nile virus (WNV) surveillance data reported to CDC through ArboNET and by states and other jurisdictions as of 8 a.m. Mountain Daylight Time, October 16, 2002.

WNV Surveillance

During October 10–16, a total of 256 laboratory-positive human cases of WNV-associated illness were reported from Indiana (n=47), Nebraska (n=34), Michigan (n=32), Ohio (n=28), Illinois (n=21), Missouri (n=11), Pennsylvania (n=10), the District of Columbia (n=seven), Iowa (n=six), Kansas (n=six), Kentucky (n=six), Louisiana (n=six), Texas (n=six), Maryland (n=five), Georgia (n=four), South Dakota (n=four), Tennessee (n=four), Mississippi (n=three), New York (n=three), Virginia (n=three), Florida (n=two), Massachusetts (n=two), Minnesota (n=two), Connecticut (n=one), New Jersey (n=one), Vermont (n=one), and Wyoming (n=one). During this reporting period, Kansas, Vermont, and Wyoming reported their first human cases of WNV infection. During the same period, WNV infections were reported in 218 dead crows and 97 other dead birds. A total of 1,135 veterinary cases (1,026 equine and one other species) and 424 WNV-positive mosquito pools were reported.

During 2002, a total of 3,052 human cases with laboratory evidence of recent WNV infection have been reported from Illinois (n=675), Michigan (n=433), Ohio (n=341), Louisiana (n=299), Indiana (n=204), Mississippi (n=171), Missouri (n=149), Nebraska (n=114), Texas (n=107), New York (n=63), Kentucky (n=50), Pennsylvania (n=47), Tennessee (n=44), Alabama (n=39), Iowa (n=39), South Dakota (n=37), Minnesota (n=33), Wisconsin (n=28), Georgia (n=23), Virginia (n=23), Maryland (n=19), Massachusetts (n=19), North Dakota (n=15), the District of Columbia (n=13), Connecticut (n=12), Florida (n=12), Arkansas (n=11), New Jersey (n=eight), Kansas (n=six), Colorado (n=five), Oklahoma (n=four), North Carolina (n=two), West Virginia (n=two), California (n=one), Rhode Island (n=one), South Carolina (n=one), Vermont (n=one), and Wyoming (n=one) (Figure). Among the 2,661 patients for whom data were available, the median age was 56 years (range: 1 month–99 years); 1,416 (54%) were male, and the dates of illness onset ranged from June 10 to October 6. A total of 153 human deaths have been reported. The median age of decedents was 79 years (range: 27–99 years); 93 (61%) deaths were among men. In addition, 6,289 dead crows and 4,611 other dead birds with WNV infection were reported from 42 states and the District of Columbia; 6,427 WNV infections in mammals (6,418 equines, three canines, and six other species) have been reported from 35 states (Alabama, Arkansas, Colorado, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio,

FIGURE. Areas reporting West Nile virus (WNV) activity — United States, 2002*



*As of 8 a.m. Mountain Daylight Time, October 16, 2002.
†California has reported human WNV activity only.

Oklahoma, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Vermont, Virginia, Wisconsin, and Wyoming). During 2002, WNV seroconversions have been reported in 342 sentinel chicken flocks from Florida, Iowa, Nebraska, Pennsylvania, and New York City; 4,434 WNV-positive mosquito pools have been reported from 26 states (Alabama, Arkansas, Connecticut, Delaware, Georgia, Illinois, Indiana, Iowa, Kentucky, Maryland, Massachusetts, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, South Dakota, Texas, Vermont, and Virginia), New York City, and the District of Columbia.

Additional information about WNV activity is available from CDC at http://www.cdc.gov/ncidod/dvbid/westnile/index.htm and http://www.cindi.usgs.gov/hazard/event/west_nile/west_nile.html.

WNV Infections in Recipients of Blood Tranfusions

CDC, the Food and Drug Administration, and the Health Resources and Services Administration, in collaboration with blood collection agencies and state and local health departments, continue to investigate West Nile virus (WNV) infections in recipients of blood transfusion. During August 28–October 16, CDC received reports from 14 states of 25 patients with West Nile meningoencephalitis (WNME) and four with other WNV-associated illnesses diagnosed after receiving blood components in the month before illness onset. All 29 of these patients resided in areas with high levels of WNV activity. CDC has been notified of one additional case, but demographic and clinical information is pending. Investigations are ongoing to determine whether transfusion was the source of WNV transmission. To date, four investigations provide evidence that WNV can be transmitted through blood transfusion.

Of the 29 cases, 14 (48%) were reported since October 1. Of the 24 patients for whom an illness onset date was specified, illness began in July (two patients), August (eight), September (13), and October (one); one additional patient, an organ donor, had West Nile viremia at the time of organ recovery in late July following receipt of multiple blood transfusions (*1*). Among these patients, the reason for hospitalization or the underlying conditions included a surgical procedure or obstetric delivery (eight); solid organ transplantation (four patients who received an organ from different donors who did not have evidence of WNV infection at the time of organ recovery); hematologic conditions (including myelodysplasia [three patients], acute myelogenous leukemia [five], acute lymphocytic leukemia [one], non-Hodgkin's lymphoma [one], thrombotic thrombocytopenic purpura [one]); and other medical conditions (six patients). These 29 patients received blood components from a median of 17 donors (range: two–185 donors). Among nine patients who died, WNME was the probable cause of death.

Among the four cases that provided evidence that WNV can be transmitted through blood transfusion, two patients developed confirmed WNME after receiving different blood components derived from a single blood donation that was subsequently found to have evidence of WNV (*2*). In follow-up testing, this donor seroconverted and developed WNV IgM antibody. In another case, WNV was isolated from a withdrawn unit of frozen plasma from the suspected donation, indicating that the virus can survive in some blood components (*1*). The donor of this plasma subsequently developed an acute febrile illness and seroconverted following the suspect collection. In a fourth case, a patient who had been hospitalized for 65 days developed WNME after receiving a component derived from a suspected donation that contained WNV RNA. Follow-up found that the donor had developed a febrile illness compatible with WNV-associated fever within days of the suspect donation; serology testing is pending.

Cases of WNV infection in patients who have received blood transfusions within the 4 weeks preceding illness onset should be reported to CDC through state and local public health authorities. Serum or tissue samples should be retained for later studies. In addition, cases of WNV infection in persons with illness onset within 2 weeks after blood donation should

be reported. Prompt reporting of these cases will facilitate withdrawal of potentially infectious blood components.

Additional information about WNV activity is available from CDC at http://www.cdc.gov/ncidod/dvbid/westnile/index.htm and http://www.cindi.usgs.gov/hazard/event/west_nile/west_nile.html.

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Notice to Readers

Pneumococcal Vaccination for Cochlear Implant Recipients

CDC and the Food and Drug Administration, in collaboration with state health departments, are investigating the occurrence of bacterial meningitis among cochlear implant recipients (*1,2*). The implant, as a foreign body, and the design of the electrode are considered possible risk factors. Other potential risk factors for meningitis among cochlear implant recipients include a history of meningitis (a leading cause of sensorineural hearing loss), a history of recurrent otitis media, immunodeficiency, a pre-existing inner ear abnormality, and an occult cerebrospinal fluid leak.

As of October 4, 2002, a total of 53 cases of meningitis were reported in the United States among cochlear implant recipients (*2*). In the United States, approximately 21,000 persons have cochlear implants (*3*). Of the 23 cases for which bacterial culture results were available, 16 were caused by *Streptococcus pneumoniae* (pneumococcus) (*2*).

Vaccination against pneumococcal disease is recommended by the Advisory Committee on Immunization Practices (ACIP) for persons at increased risk for pneumococcal meningitis. Because preliminary data suggest a higher risk for pneumococcal meningitis in cochlear implant recipients, CDC recommends that all persons with cochlear implants receive age-appropriate vaccination against pneumococcal disease as recommended for other persons at high risk for invasive pneumococcal disease; recommendations will be reviewed after completion of the investigation. These persons should receive the 7-valent pneumococcal conjugate (Prevnar®) or 23-valent pneumococcal polysaccharide (Pneumovax® and Pnu-Imune®) vaccine, or both, according to ACIP schedules for persons at high risk (*4,5*). During the current pneumococcal conjugate vaccine shortage, children aged <5 years with cochlear implants should be given the same priority for available vaccine as children in other high-risk groups (*6*). Additional information on the use of vaccines for cochlear implant recipients is available from CDC's National Immunization Program at http://www.cdc.gov/nip/issues/cochlear/cochlear-hcp.htm.

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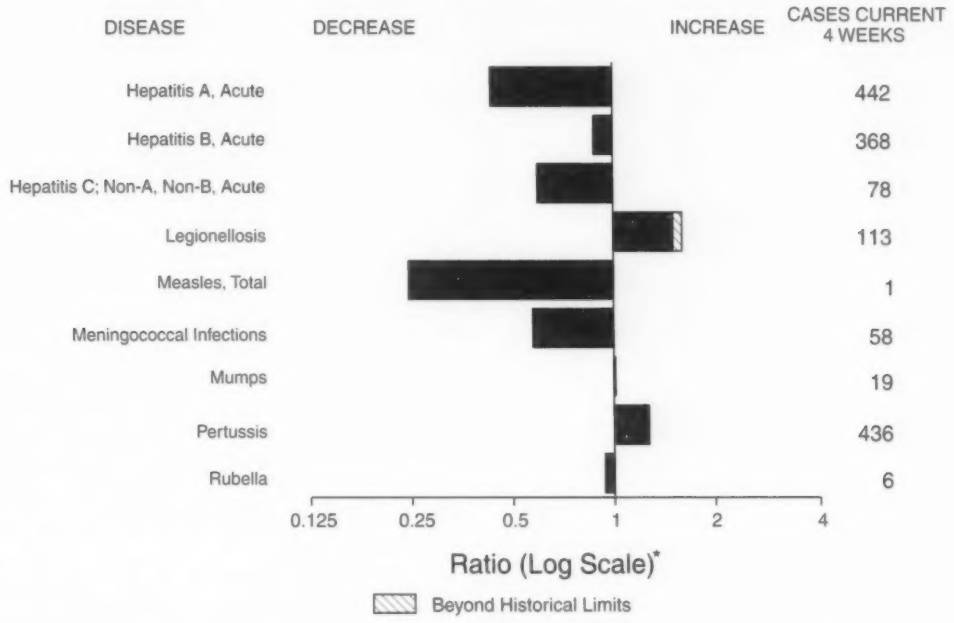
Erratum: Vol. 51, No. 40

In the report "Vancomycin-Resistant *Staphylococcus aureus*—Pennsylvania, 2002," on page 902, reference 3 was incorrect. The reference should be:

3. National Committee for Clinical Laboratory Standards. Methods for dilution antimicrobial susceptibility tests for bacteria that grow aerobically. 5th ed. Approved standard, M7-A5. Wayne, Pennsylvania: National Committee for Laboratory Standards, 2000.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending October 12, 2002, with historical data



* Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending October 12, 2002 (41st Week)*

		Cum. 2002	Cum. 2001		Cum. 2002	Cum. 2001
Anthrax		2	4	Encephalitis: West Nile†	900	46
Botulism:	foodborne	11	33	Hansen disease (leprosy)†	61	53
	infant	43	77	Hantavirus pulmonary syndrome†	11	7
	other (wound & unspecified)	19	13	Hemolytic uremic syndrome, postdiarrheal†	155	137
Brucellosis†		62	102	HIV infection, pediatric†§	137	147
Chancroid		57	29	Plague	-	2
Cholera		4	4	Poliomyelitis, paralytic	-	-
Cyclosporiasis†		160	127	Psittacosis†	17	12
Diphtheria		1	2	Q fever†	34	21
Ehrlichiosis:	human granulocytic (HGE)†	259	187	Rabies, human	2	1
	human monocytic (HME)†	129	97	Streptococcal toxic-shock syndrome†	64	62
	other and unspecified	7	5	Tetanus	18	26
Encephalitis:	California serogroup viral†	95	83	Toxic-shock syndrome	90	94
	eastern equine†	2	8	Trichinosis	12	20
	Powassan†	-	-	Tularemia†	52	114
	St. Louis†	1	75	Yellow fever	1	-
	western equine†	2	-			

-:No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).
† Not notifiable in all states.
§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP). Last update September 29, 2002.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending October 12, 2002, and October 13, 2001 (41st Week)*

Reporting Area	AIDS		Chlamydia†		Cryptosporidiosis		*Escherichia coli, Enterohemorrhagic*			
							O157:H7		Shiga Toxin Positive, Serogroup non-O157	
	Cum. 2002§	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	31,555	30,610	594,396	604,247	2,180	3,108	2,744	2,535	131	116
NEW ENGLAND	1,236	1,116	20,631	18,899	145	122	223	213	29	35
Maine	27	36	1,322	1,046	10	15	32	25	5	1
N.H.	25	27	1,260	1,092	26	10	28	29	-	3
Vt.	12	13	727	486	28	30	8	13	1	1
Mass.	629	595	8,549	8,086	50	47	104	106	9	9
R.I.	82	76	2,146	2,322	16	4	12	11	-	1
Conn.	461	369	6,627	5,867	15	16	39	29	14	20
MID. ATLANTIC	7,170	7,965	68,162	65,357	252	279	193	191	-	-
Upstate N.Y.	482	1,079	13,321	10,520	101	82	146	123	-	-
N.Y. City	4,225	4,361	22,355	23,704	104	102	11	15	-	-
N.J.	1,117	1,345	10,141	10,651	9	14	36	53	-	-
Pa.	1,346	1,180	22,345	20,482	38	81	N	N	-	-
E.N. CENTRAL	3,291	2,223	102,866	111,628	672	1,417	685	647	14	7
Ohio	663	424	23,697	29,369	106	143	131	141	12	5
Ind.	422	264	13,097	12,282	35	69	55	71	-	-
Ill.	1,556	989	27,835	33,692	69	464	144	155	-	-
Mich.	500	411	25,666	23,337	86	157	111	80	2	2
Wis.	150	135	12,571	12,948	376	584	244	200	-	-
W.N. CENTRAL	507	636	33,370	30,796	337	430	408	416	29	33
Minn.	113	105	7,497	6,454	179	137	144	164	25	27
Iowa	67	73	4,086	3,967	37	74	99	70	-	-
Mo.	229	302	11,960	10,988	32	40	54	52	N	N
N. Dak.	1	2	740	806	6	12	3	18	-	2
S. Dak.	4	22	1,710	1,403	27	6	35	37	1	3
Nebr.	44	61	2,362	2,531	43	158	44	56	3	1
Kans.	49	71	5,015	4,647	13	3	29	19	-	-
S. ATLANTIC	9,368	9,405	111,873	117,270	270	305	239	195	36	22
Del.	155	202	2,030	2,230	3	6	7	4	-	1
Md.	1,412	1,494	12,628	11,944	20	32	23	26	-	-
D.C.	453	639	2,576	2,564	4	11	-	-	-	-
Va.	612	763	12,245	14,188	11	22	52	46	9	2
W. Va.	72	59	1,859	1,854	2	2	7	10	-	-
N.C.	782	699	19,077	17,684	30	24	36	41	-	-
S.C.	649	565	9,451	12,488	6	7	5	13	-	-
Ga.	1,356	1,027	22,729	25,178	121	135	51	30	10	9
Fla.	3,877	3,957	29,278	29,140	73	66	58	25	17	10
E.S. CENTRAL	1,469	1,401	37,349	39,097	103	41	88	119	-	-
Ky.	253	278	6,557	7,007	5	4	27	59	-	-
Tenn.	620	438	12,630	11,590	50	12	37	35	-	-
Ala.	298	347	10,137	10,835	42	13	17	16	-	-
Miss.	298	338	8,025	9,665	6	12	7	9	-	-
W.S. CENTRAL	3,336	3,087	82,274	84,469	32	110	55	163	-	-
Ark.	190	156	5,133	5,953	7	6	9	13	-	-
La.	815	652	15,448	14,500	5	7	2	7	-	-
Okla.	156	187	8,658	8,123	15	12	19	26	-	-
Tex.	2,175	2,092	53,035	55,893	5	85	25	117	-	-
MOUNTAIN	1,043	1,068	37,199	36,207	135	182	301	235	17	13
Mont.	9	14	1,712	1,493	4	28	25	16	-	-
Idaho	24	17	1,966	1,511	27	20	42	54	8	2
Wyo.	8	3	706	642	9	6	12	8	2	2
Colo.	212	244	10,983	10,278	49	37	82	81	3	6
N. Mex.	65	107	5,123	4,943	18	21	9	11	3	3
Ariz.	444	417	11,944	11,323	12	7	33	21	1	-
Utah	53	87	1,982	1,931	12	58	74	29	-	-
Nev.	228	179	2,783	4,086	4	5	24	15	-	-
PACIFIC	4,134	3,709	100,672	100,524	234	222	552	356	6	6
Wash.	386	385	11,443	10,660	43	U	135	98	-	-
Oreg.	260	154	5,320	5,754	31	46	186	62	6	6
Calif.	3,379	3,098	77,674	78,866	158	172	188	175	-	-
Alaska	22	17	2,806	2,081	-	1	6	4	-	-
Hawaii	87	55	3,429	3,163	2	3	37	17	-	-
Guam	2	9	-	323	-	-	N	N	-	-
P.R.	915	932	1,870	2,052	-	-	-	2	-	-
V.I.	67	2	125	124	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	2	U	138	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

† Chlamydia refers to genital infections caused by *C. trachomatis*.

§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update September 29, 2002.

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 12, 2002, and October 13, 2001 (41st Week)*

Reporting Area	*Escherichia coli Enterohemorrhagic* Shiga Toxin Positive, Not Serogrouped		Giardiasis	Gonorrhea		*Haemophilus influenzae*, Invasive All Ages, All Serotypes		*Haemophilus influenzae*, Invasive Age <5 Years Serotype B	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	30	13	12,904	251,296	279,775	1,184	1,164	17	20
NEW ENGLAND	-	1	1,317	5,782	5,325	82	87	-	1
Maine	-	-	165	110	107	1	2	-	-
N.H.	-	-	32	104	146	7	4	-	-
Vt.	-	1	106	80	53	7	3	-	-
Mass.	-	-	658	2,591	2,484	42	39	-	1
R.I.	-	-	128	699	644	10	3	-	-
Conn.	-	-	228	2,198	1,891	15	36	-	-
MID. ATLANTIC	-	1	2,799	31,224	32,323	215	172	3	3
Upstate N.Y.	-	-	949	6,820	6,547	98	56	2	-
N.Y. City	-	-	1,050	9,255	9,965	51	43	-	-
N.J.	-	-	275	5,682	5,530	45	40	-	-
Pa.	-	1	525	9,467	10,281	21	33	1	3
E.N. CENTRAL	11	5	2,436	49,834	58,879	176	217	3	2
Ohio	10	5	731	13,138	16,397	65	56	-	1
Ind.	-	-	-	5,649	5,367	36	43	1	-
Ill.	-	-	564	14,944	18,756	57	77	-	-
Mich.	1	-	685	11,582	13,629	11	12	2	-
Wis.	-	-	456	4,521	4,730	7	29	-	1
W.N. CENTRAL	-	3	1,571	13,050	13,087	51	58	1	1
Minn.	-	-	632	2,291	2,053	37	32	1	-
Iowa	-	-	243	944	1,042	1	-	-	-
Mo.	N	N	378	6,817	6,770	10	16	-	-
N. Dak.	-	3	11	42	37	-	7	-	-
S. Dak.	-	-	58	205	226	-	-	-	-
Nebr.	-	-	122	711	912	-	2	-	1
Kans.	-	-	127	2,040	2,047	3	1	-	-
S. ATLANTIC	-	-	2,226	64,302	73,015	306	288	2	1
Del.	-	-	42	1,217	1,342	-	-	-	-
Md.	-	-	100	6,770	7,119	71	72	2	-
D.C.	-	-	32	2,126	2,293	-	-	-	-
Va.	-	-	206	7,510	8,412	27	25	-	-
W. Va.	-	-	45	737	527	14	14	-	1
N.C.	-	-	-	12,502	13,746	30	42	-	-
S.C.	-	-	112	5,730	9,019	12	4	-	-
Ga.	-	-	709	12,526	13,838	78	73	-	-
Fla.	-	-	980	15,184	16,719	74	58	-	-
E.S. CENTRAL	8	2	300	21,473	25,261	55	63	1	-
Ky.	8	2	-	2,792	2,779	4	2	-	-
Tenn.	-	-	137	7,352	7,801	28	33	-	-
Ala.	-	-	163	6,535	8,386	16	26	1	-
Miss.	-	-	-	4,794	6,295	7	2	-	-
W.S. CENTRAL	-	-	186	36,692	41,662	51	44	2	1
Ark.	-	-	130	3,044	3,712	2	-	-	-
La.	-	-	3	9,528	10,040	7	8	-	-
Okla.	-	-	53	3,710	3,734	37	35	-	-
Tex.	-	-	-	20,410	24,176	5	1	2	1
MOUNTAIN	11	1	1,299	7,904	8,197	140	125	2	7
Mont.	-	-	74	76	84	-	-	-	-
Idaho	-	-	99	70	61	2	1	-	-
Wyo.	-	-	25	49	64	1	1	-	-
Colo.	11	1	422	2,708	2,483	26	34	-	-
N. Mex.	-	-	131	1,047	787	21	20	-	1
Ariz.	-	-	173	2,939	3,076	64	52	1	4
Utah	-	-	257	198	148	16	6	-	-
Nev.	-	-	118	817	1,494	10	11	1	2
PACIFIC	-	-	770	21,035	22,026	108	110	3	4
Wash.	-	-	289	2,269	2,372	3	2	2	-
Oreg.	-	-	324	676	904	51	32	-	-
Calif.	-	-	-	17,087	17,932	22	49	1	4
Alaska	-	-	84	468	332	1	6	-	-
Hawaii	-	-	73	535	486	31	21	-	-
Guam	-	-	-	-	39	-	-	-	-
P.R.	-	-	33	281	468	1	1	-	-
V.I.	-	-	-	31	21	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	1	13	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 12, 2002, and October 13, 2001 (41st Week)*

Reporting Area	*Haemophilus influenzae*, Invasive, Age <5 Years, Non-Serotype B, Cum. 2002	*Haemophilus influenzae*, Invasive, Age <5 Years, Non-Serotype B, Cum. 2001	*Haemophilus influenzae*, Invasive, Age <5 Years, Unknown Serotype, Cum. 2002	*Haemophilus influenzae*, Invasive, Age <5 Years, Unknown Serotype, Cum. 2001	Hepatitis (Viral, Acute), By Type, A, Cum. 2002	Hepatitis (Viral, Acute), By Type, A, Cum. 2001	Hepatitis (Viral, Acute), By Type, B, Cum. 2002	Hepatitis (Viral, Acute), By Type, B, Cum. 2001	Hepatitis (Viral, Acute), By Type, C; Non-A, Non-B, Cum. 2002	Hepatitis (Viral, Acute), By Type, C; Non-A, Non-B, Cum. 2001
UNITED STATES	193	190	14	24	6,599	7,875	5,337	5,596	12,103	3,186
NEW ENGLAND	9	15	-	-	245	541	200	105	20	31
Maine	-	-	-	-	8	10	8	5	-	-
N.H.	-	1	-	-	11	15	18	11	-	-
Vt.	-	-	-	-	1	12	4	5	12	6
Mass.	6	7	-	-	110	257	110	22	8	25
R.I.	-	-	-	-	30	46	24	22	-	-
Conn.	3	7	-	-	85	201	36	40	-	-
MID. ATLANTIC	27	25	-	3	816	1,004	1,147	1,075	1,340	1,051
Upstate N.Y.	11	7	-	1	151	203	107	98	56	24
N.Y. City	8	7	-	-	370	353	578	502	-	-
N.J.	5	4	-	-	114	240	283	231	1,257	971
Pa.	3	7	-	2	181	208	179	244	27	56
E.N. CENTRAL	27	34	1	2	872	977	638	740	79	141
Ohio	7	9	1	-	274	187	81	85	7	8
Ind.	7	6	-	1	39	87	38	42	-	1
Ill.	11	13	-	-	234	367	105	116	12	9
Mich.	1	-	-	1	190	272	414	461	60	123
Wis.	1	6	-	-	135	64	-	36	-	-
W.N. CENTRAL	3	3	3	6	257	314	175	168	680	936
Minn.	3	2	1	2	37	34	21	17	-	9
Iowa	-	-	-	-	67	29	12	19	1	-
Mo.	-	-	2	4	72	70	97	96	665	915
N. Dak.	-	1	-	-	1	3	4	1	-	-
S. Dak.	-	-	-	-	3	2	1	1	1	-
Nebr.	-	-	-	-	17	31	22	23	9	5
Kans.	-	-	-	-	60	145	18	11	4	7
S. ATLANTIC	47	40	1	6	1,967	1,737	1,358	1,149	139	80
Del.	-	-	-	-	11	13	7	21	5	8
Md.	4	7	-	1	247	195	99	116	6	7
D.C.	-	-	-	-	65	43	18	11	-	-
Va.	4	5	-	-	107	109	160	139	9	-
W. Va.	1	1	1	1	17	18	18	20	2	9
N.C.	3	2	-	4	190	173	194	173	22	18
S.C.	2	1	-	-	55	64	102	26	4	6
Ga.	17	16	-	-	385	775	338	332	29	-
Fla.	16	8	-	-	890	347	422	311	62	32
E.S. CENTRAL	11	12	1	3	208	323	279	379	162	175
Ky.	1	-	-	1	41	114	45	47	3	9
Tenn.	6	6	-	1	89	117	103	187	25	59
Ala.	3	5	1	1	32	68	61	75	5	4
Miss.	1	1	-	-	46	24	70	70	129	103
W.S. CENTRAL	12	7	-	-	423	726	419	619	9,541	615
Ark.	1	-	-	-	31	61	68	76	5	9
La.	2	2	-	-	39	77	65	102	34	129
Okla.	7	5	-	-	46	101	42	83	5	4
Tex.	2	-	-	-	307	487	244	358	9,497	473
MOUNTAIN	34	20	7	1	480	603	498	379	54	46
Mont.	-	-	-	-	13	10	8	3	-	1
Idaho	1	-	-	-	24	51	6	10	-	2
Wyo.	-	-	-	-	3	7	17	2	5	5
Colo.	2	2	-	-	70	76	63	82	17	6
N. Mex.	6	8	1	1	24	34	122	108	1	11
Ariz.	16	8	5	-	256	309	192	115	4	9
Utah	5	2	-	-	51	59	46	20	4	3
Nev.	4	-	1	-	39	57	44	39	23	9
PACIFIC	23	34	1	3	1,331	1,650	623	982	88	111
Wash.	1	1	-	1	135	114	53	115	17	19
Oreg.	5	5	-	-	55	90	99	132	15	13
Calif.	13	26	1	1	1,130	1,416	462	709	56	79
Alaska	1	1	-	-	9	14	3	9	-	-
Hawaii	3	1	-	1	2	16	6	17	-	-
Guam	-	-	-	-	-	1	-	-	-	-
P.R.	-	1	-	-	87	174	75	218	-	1
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	37	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 12, 2002, and October 13, 2001 (41st Week)*

Reporting Area	Legionellosis		Listeriosis		Lyme Disease		Malaria		Measles Total	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	810	839	428	479	11,967	12,347	988	1,201	22†	106§
NEW ENGLAND	75	54	48	43	3,475	3,576	50	78	-	5
Maine	2	7	5	-	53	-	5	4	-	-
N.H.	4	8	4	4	203	72	7	2	-	-
Vt.	30	5	3	2	27	16	4	1	-	1
Mass.	26	19	24	22	961	1,040	15	42	-	3
R.I.	2	6	1	1	288	413	5	7	-	-
Conn.	11	9	11	14	1,943	2,035	14	22	-	1
MID. ATLANTIC	216	200	122	88	6,974	6,690	231	364	7	19
Upstate N.Y.	71	54	50	24	4,074	2,680	36	53	1	4
N.Y. City	43	39	25	20	125	61	145	218	6	6
N.J.	21	20	24	16	866	1,888	28	54	-	1
Pa.	81	87	23	28	1,909	2,061	22	39	-	8
E.N. CENTRAL	199	230	45	74	68	673	111	147	3	10
Ohio	88	93	19	12	50	33	17	21	1	3
Ind.	17	17	6	8	18	22	11	15	2	4
Ill.	-	23	1	22	-	30	28	61	-	3
Mich.	66	58	15	22	-	5	43	32	-	-
Wis.	28	39	4	10	U	583	12	18	-	-
W.N. CENTRAL	42	44	14	15	197	340	51	32	3	4
Minn.	11	9	3	-	119	277	16	6	1	2
Iowa	9	8	1	2	31	27	4	6	-	-
Mo.	11	18	6	8	35	30	14	12	2	2
N. Dak.	-	1	1	-	-	-	1	-	-	-
S. Dak.	2	3	1	-	1	-	1	-	-	-
Nebr.	9	4	1	1	5	4	5	2	-	-
Kans.	-	1	1	4	6	2	10	6	-	-
S. ATLANTIC	154	141	65	60	1,058	836	300	243	2	5
Del.	7	8	-	2	138	144	3	2	-	-
Md.	30	30	14	11	568	509	96	100	-	3
D.C.	5	7	-	-	20	10	17	13	-	-
Va.	18	20	7	11	129	110	28	43	-	1
W. Va.	N	N	-	5	16	10	3	1	-	-
N.C.	10	7	5	4	103	35	19	13	-	-
S.C.	6	10	8	5	18	5	7	6	-	-
Ga.	12	11	10	11	2	-	69	39	-	1
Fla.	66	48	20	11	64	13	58	26	2	-
E.S. CENTRAL	28	52	14	21	38	56	19	33	-	2
Ky.	11	12	2	7	20	22	7	13	-	2
Tenn.	10	24	8	8	18	19	3	11	-	-
Ala.	7	12	4	6	-	8	4	5	-	-
Miss.	-	4	-	-	-	7	5	4	-	-
W.S. CENTRAL	8	20	12	31	18	77	14	73	2	1
Ark.	-	-	-	1	3	-	2	3	-	-
La.	1	6	-	-	2	7	4	6	-	-
Okla.	3	3	7	2	-	-	8	2	-	-
Tex.	4	11	5	28	13	70	-	62	2	1
MOUNTAIN	36	43	26	32	18	10	40	47	1	2
Mont.	3	-	-	-	-	-	2	2	-	-
Idaho	1	3	2	1	4	5	-	3	-	1
Wyo.	1	2	-	1	1	1	-	-	-	-
Colo.	6	13	6	9	3	-	21	21	-	-
N. Mex.	2	2	2	7	1	-	2	3	-	-
Ariz.	8	15	12	6	2	-	7	7	-	1
Utah	11	5	3	2	6	1	5	3	-	-
Nev.	4	3	1	6	1	3	3	8	1	-
PACIFIC	52	55	82	115	121	89	172	184	4	58
Wash.	5	7	8	7	9	7	16	8	-	15
Oreg.	N	N	8	11	14	9	9	13	-	3
Calif.	46	42	58	91	95	71	138	151	3	33
Alaska	-	1	-	-	3	2	2	1	-	-
Hawaii	1	5	8	6	N	N	7	11	1	7
Guam	-	-	-	-	-	-	-	1	-	-
P.R.	-	2	1	-	N	N	-	5	-	1
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

† Of 22 cases reported, 10 were indigenous and 12 were imported from another country.

§ Of 106 cases reported, 53 were indigenous and 53 were imported from another country.

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 12, 2002, and October 13, 2001 (41st Week)*

Reporting Area	Meningococcal Disease		Mumps		Pertussis		Rabies, Animal	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	1,344	1,868	209	191	5,853	4,199	4,810	5,775
NEW ENGLAND	79	86	7	1	497	385	750	596
Maine	7	3	-	-	12	21	49	55
N.H.	11	11	4	-	16	15	40	19
Vt.	4	5	-	-	98	28	85	55
Mass.	39	47	2	1	333	299	234	219
R.I.	5	4	-	-	13	5	66	53
Conn.	13	16	1	-	25	17	276	195
MID. ATLANTIC	127	208	22	23	334	284	904	1,074
Upstate N.Y.	37	53	5	3	250	118	565	650
N.Y. City	21	35	1	11	10	46	10	28
N.J.	25	34	-	3	3	18	152	162
Pa.	44	86	16	6	71	102	177	234
E.N. CENTRAL	178	289	25	23	707	664	135	130
Ohio	68	75	8	1	349	253	33	42
Ind.	28	33	2	1	103	67	30	2
Ill.	36	73	7	16	113	72	30	24
Mich.	34	63	7	3	43	103	42	44
Wis.	12	45	1	2	99	169	-	18
W.N. CENTRAL	122	124	15	7	563	212	329	314
Minn.	29	18	3	3	263	70	36	40
Iowa	18	25	1	-	127	23	62	73
Mo.	41	43	5	-	116	87	45	37
N. Dak.	-	6	1	-	-	4	12	33
S. Dak.	2	5	-	-	6	4	65	44
Nebr.	25	13	-	1	6	4	-	4
Kans.	7	14	5	3	45	20	109	83
S. ATLANTIC	243	288	23	33	348	198	1,946	1,990
Del.	7	3	-	-	2	-	24	30
Md.	7	38	5	5	55	33	199	409
D.C.	-	-	-	-	2	1	-	-
Va.	36	33	3	6	117	35	397	373
W. Va.	4	12	-	-	30	2	149	118
N.C.	29	60	1	4	38	58	592	473
S.C.	26	29	2	5	40	31	113	94
Ga.	29	43	4	8	18	20	303	341
Fla.	105	70	8	5	46	18	169	152
E.S. CENTRAL	77	119	11	7	209	132	139	192
Ky.	12	20	3	1	79	38	24	25
Tenn.	32	53	2	1	92	56	93	106
Ala.	20	30	3	-	31	34	22	57
Miss.	13	16	3	5	7	4	-	4
W.S. CENTRAL	166	279	16	10	1,415	433	104	928
Ark.	23	19	-	-	439	34	3	-
La.	28	67	1	2	7	7	-	7
Okla.	19	26	-	-	66	23	101	56
Tex.	96	167	15	8	903	369	-	865
MOUNTAIN	73	83	16	14	739	1,168	258	236
Mont.	2	4	-	1	5	30	16	31
Idaho	3	7	2	1	62	169	35	28
Wyo.	-	5	-	1	10	1	18	28
Colo.	21	31	2	3	297	256	58	-
N. Mex.	4	10	1	2	148	127	7	15
Ariz.	23	13	1	1	106	496	108	119
Utah	4	7	6	1	68	74	10	14
Nev.	16	6	4	4	43	15	6	1
PACIFIC	279	392	74	73	1,041	723	245	315
Wash.	53	57	-	1	357	128	-	-
Oreg.	38	50	N	N	166	46	13	3
Calif.	177	272	60	34	497	510	208	274
Alaska	4	2	-	1	4	9	24	38
Hawaii	7	11	14	37	17	30	-	-
Guam	-	-	-	-	-	-	-	-
P.R.	5	5	-	1	2	-	49	75
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	1	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 12, 2002, and October 13, 2001 (41st Week)*

Reporting Area	Rocky Mountain Spotted Fever		Rubella				Salmonellosis	
			Rubella		Congenital Rubella			
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	763	478	13	20	2	-	30,671	31,343
NEW ENGLAND	3	3	-	-	-	-	1,742	1,989
Maine	-	-	-	-	-	-	113	153
N.H.	-	1	-	-	-	-	113	146
Vt.	-	-	-	-	-	-	67	67
Mass.	-	2	-	-	-	-	969	1,143
R.I.	3	-	-	-	-	-	129	110
Conn.	-	-	-	-	-	-	351	370
MID. ATLANTIC	36	28	1	8	-	-	3,799	4,176
Upstate N.Y.	7	2	1	1	-	-	1,233	949
N.Y. City	8	2	-	6	-	-	1,061	1,056
N.J.	9	7	-	1	-	-	562	999
Pa.	12	17	-	-	-	-	943	1,172
E.N. CENTRAL	15	15	1	2	-	-	4,222	4,104
Ohio	10	1	-	-	-	-	1,120	1,080
Ind.	2	1	-	-	-	-	372	433
Ill.	-	12	-	2	-	-	1,322	1,173
Mich.	3	1	1	-	-	-	707	714
Wis.	-	-	-	-	-	-	701	704
W.N. CENTRAL	93	62	-	3	-	-	2,049	1,855
Minn.	-	-	-	-	-	-	467	518
Iowa	3	2	-	1	-	-	390	276
Mo.	85	57	-	1	-	-	710	491
N. Dak.	-	1	-	-	-	-	25	54
S. Dak.	1	2	-	-	-	-	88	134
Nebr.	4	-	-	-	-	-	126	134
Kans.	-	-	-	1	-	-	243	248
S. ATLANTIC	403	230	5	4	-	-	8,145	7,134
Del.	4	9	-	-	-	-	70	83
Md.	46	36	-	1	-	-	760	653
D.C.	-	-	-	-	-	-	62	68
Va.	31	19	-	-	-	-	840	1,105
W. Va.	2	-	-	-	-	-	106	102
N.C.	232	126	-	-	-	-	1,129	1,055
S.C.	56	27	-	2	-	-	612	672
Ga.	21	9	-	-	-	-	1,462	1,370
Fla.	11	4	5	1	-	-	3,104	2,026
E.S. CENTRAL	88	95	-	-	1	-	2,360	2,162
Ky.	5	2	-	-	-	-	283	301
Tenn.	64	67	-	-	1	-	617	517
Ala.	16	13	-	-	-	-	658	575
Miss.	3	13	-	-	-	-	802	769
W.S. CENTRAL	106	34	2	1	-	-	2,504	4,032
Ark.	45	5	-	-	-	-	764	735
La.	-	2	-	-	-	-	516	714
Okla.	61	27	-	-	-	-	401	383
Tex.	-	-	2	1	-	-	823	2,200
MOUNTAIN	13	10	1	-	-	-	1,787	1,744
Mont.	1	1	-	-	-	-	76	60
Idaho	-	1	-	-	-	-	116	114
Wyo.	4	2	-	-	-	-	58	53
Colo.	2	1	-	-	-	-	471	484
N. Mex.	1	1	-	-	-	-	251	232
Ariz.	-	-	-	-	-	-	492	472
Utah	-	3	1	-	-	-	165	184
Nev.	5	1	-	-	-	-	158	145
PACIFIC	6	1	3	2	1	-	4,063	4,147
Wash.	-	-	-	-	-	-	407	405
Oreg.	2	1	-	-	-	-	283	230
Calif.	4	-	3	1	-	-	3,094	3,184
Alaska	-	-	-	-	-	-	50	33
Hawaii	-	-	-	1	1	-	229	295
Guam	-	-	-	-	-	-	-	19
P.R.	-	-	-	3	-	-	171	752
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	25	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 12, 2002, and October 13, 2001 (41st Week)*

Reporting Area	Shigellosis		Streptococcal Disease, Invasive, Group A		*Streptococcus pneumoniae*, Drug Resistant, Invasive		*Streptococcus pneumoniae*, Invasive (<5 Years)	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	13,377	14,880	3,319	3,001	1,739	2,147	189	338
NEW ENGLAND	266	257	155	190	17	104	2	36
Maine	6	6	20	10	-	-	-	-
N.H.	11	6	30	N	-	-	N	N
Vt.	1	7	9	13	4	7	1	-
Mass.	166	181	81	57	N	N	N	N
R.I.	14	17	15	12	13	4	1	3
Conn.	68	40	-	98	-	93	-	33
MID. ATLANTIC	1,041	1,229	547	548	91	138	53	86
Upstate N.Y.	229	405	254	223	79	132	53	86
N.Y. City	330	344	130	150	U	U	U	U
N.J.	302	239	116	110	N	N	N	N
Pa.	180	241	47	65	12	6	-	-
E.N. CENTRAL	1,399	3,548	581	677	180	149	81	98
Ohio	520	2,363	184	171	43	-	11	-
Ind.	77	178	44	54	132	149	45	47
Ill.	535	489	105	219	2	-	-	51
Mich.	138	255	248	182	3	-	N	N
Wis.	129	263	-	51	N	N	25	-
W.N. CENTRAL	814	1,450	201	317	170	124	39	52
Minn.	177	351	103	141	56	55	39	43
Iowa	101	331	-	-	N	N	N	N
Mo.	134	268	41	67	5	9	-	-
N. Dak.	15	20	-	17	1	6	-	9
S. Dak.	150	350	12	11	1	3	-	-
Nebr.	166	67	16	34	29	16	N	N
Kans.	71	63	29	47	78	35	N	N
S. ATLANTIC	4,891	2,022	690	492	1,065	1,147	5	5
Del.	177	13	2	2	3	6	N	N
Md.	917	127	117	N	N	N	N	N
D.C.	48	49	6	21	48	5	1	3
Va.	715	260	66	67	N	N	N	N
W. Va.	9	8	17	18	37	37	4	2
N.C.	313	290	110	125	N	N	U	U
S.C.	96	221	31	9	153	235	N	N
Ga.	1,234	329	147	156	262	343	N	N
Fla.	1,382	725	194	94	562	521	N	N
E.S. CENTRAL	1,069	1,300	90	94	115	205	-	-
Ky.	119	577	18	34	13	24	N	N
Tenn.	76	79	72	60	102	180	N	N
Ala.	589	182	-	-	-	1	N	N
Miss.	285	462	-	-	-	-	-	-
W.S. CENTRAL	1,156	2,340	106	276	63	242	5	61
Ark.	155	494	5	-	6	14	-	-
La.	299	198	-	1	57	228	2	61
Okla.	437	52	38	37	N	N	3	-
Tex.	265	1,596	63	238	N	N	-	-
MOUNTAIN	683	764	471	337	38	34	4	-
Mont.	3	4	-	-	-	-	-	-
Idaho	14	33	9	7	N	N	N	N
Wyo.	8	7	7	11	9	5	-	-
Colo.	144	196	120	130	-	-	-	-
N. Mex.	138	107	89	68	29	27	-	-
Ariz.	307	300	217	118	-	-	N	N
Utah	28	49	29	3	-	-	4	-
Nev.	41	68	-	-	-	2	-	-
PACIFIC	2,058	1,970	478	70	-	4	-	-
Wash.	129	159	65	-	-	-	N	N
Oreg.	83	92	N	N	N	N	N	N
Calif.	1,789	1,662	351	-	N	N	N	N
Alaska	6	6	-	-	-	-	N	N
Hawaii	51	51	62	70	-	4	-	-
Guam	-	37	-	1	-	-	-	-
P.R.	7	15	N	N	-	-	N	N
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	-	-	U	U
C.N.M.I.	17	U	-	U	-	-	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending October 12, 2002, and October 13, 2001 (41st Week)*

Reporting Area	Syphilis				Tuberculosis		Typhoid Fever	
	Primary & Secondary		Congenital					
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	4,848	4,700	250	401	9,110	10,727	201	285
NEW ENGLAND	111	47	-	4	277	354	15	13
Maine	2	-	-	-	10	15	-	1
N.H.	4	1	-	-	10	13	-	2
Vt.	1	2	-	-	-	4	-	-
Mass.	78	26	-	3	155	184	9	9
R.I.	6	8	-	-	29	49	-	-
Conn.	20	10	-	1	73	89	6	1
MID. ATLANTIC	545	406	45	64	1,651	1,793	46	99
Upstate N.Y.	26	15	5	4	227	276	8	15
N.Y. City	330	221	19	30	845	892	23	41
N.J.	114	101	20	30	395	395	11	36
Pa.	75	69	1	-	184	230	4	7
E.N. CENTRAL	845	819	37	55	946	1,094	18	31
Ohio	122	65	2	2	151	215	6	3
Ind.	57	129	-	8	88	77	2	2
Ill.	256	287	26	36	469	513	1	17
Mich.	391	316	9	5	197	227	4	5
Wis.	19	22	-	4	41	62	5	4
W.N. CENTRAL	80	82	-	9	425	424	8	13
Minn.	38	30	-	2	179	174	3	6
Iowa	2	4	-	-	24	34	-	-
Mo.	22	22	-	5	110	109	1	7
N. Dak.	-	-	-	-	1	3	-	-
S. Dak.	-	-	-	-	9	12	-	-
Nebr.	3	7	-	-	20	29	4	-
Kans.	15	19	-	2	82	63	-	-
S. ATLANTIC	1,255	1,614	62	98	1,787	1,982	32	35
Del.	10	11	-	-	13	15	-	-
Md.	149	203	13	3	222	174	7	9
D.C.	48	32	1	2	-	51	-	-
Va.	51	83	1	4	145	198	1	10
W. Va.	2	3	-	-	27	25	-	-
N.C.	228	375	18	12	275	267	1	2
S.C.	98	199	7	20	141	143	-	-
Ga.	271	310	5	22	313	361	8	9
Fla.	398	398	14	35	651	748	15	5
E.S. CENTRAL	381	512	12	27	574	655	4	1
Ky.	77	38	3	-	105	102	4	-
Tenn.	139	263	3	16	228	240	-	1
Ala.	131	95	4	5	161	211	-	-
Miss.	34	116	2	6	80	102	-	-
W.S. CENTRAL	656	573	53	66	1,330	1,628	4	15
Ark.	25	30	2	6	101	119	-	-
La.	121	134	-	-	-	100	-	-
Okla.	51	50	3	5	111	119	-	-
Tex.	459	359	48	55	1,118	1,290	4	15
MOUNTAIN	223	175	12	26	274	426	10	8
Mont.	-	-	-	-	6	6	-	1
Idaho	1	1	-	-	9	7	-	-
Wyo.	-	1	-	-	3	3	-	-
Colo.	33	20	1	1	48	103	5	1
N. Mex.	26	15	-	2	21	45	1	-
Ariz.	150	124	11	23	150	168	-	1
Utah	6	8	-	-	24	29	2	1
Nev.	7	6	-	-	13	65	2	4
PACIFIC	752	472	29	52	1,846	2,371	64	70
Wash.	48	41	1	-	180	189	4	4
Oreg.	14	13	1	-	86	84	2	7
Calif.	682	407	26	52	1,423	1,945	54	56
Alaska	-	-	-	-	40	40	-	1
Hawaii	8	11	1	-	117	113	4	2
Guam	-	5	-	1	-	47	-	2
P.R.	199	209	13	9	33	95	-	-
V.I.	1	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	15	U	-	U	32	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE III. Deaths in 122 U.S. cities,* week ending October 12, 2002 (41st Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	489	336	108	31	8	5	46
Boston, Mass.	152	97	40	8	5	1	13
Bridgeport, Conn.	30	22	5	3	-	-	-
Cambridge, Mass.	18	16	-	1	1	-	2
Fall River, Mass.	17	14	3	-	-	-	4
Hartford, Conn.	50	26	16	7	1	-	1
Lowell, Mass.	25	20	5	-	-	-	3
Lynn, Mass.	14	10	4	-	-	-	1
New Bedford, Mass.	25	18	7	-	-	-	3
New Haven, Conn.	32	23	8	1	-	-	3
Providence, R.I.	U	U	U	U	U	U	U
Somerville, Mass.	6	3	2	1	-	-	-
Springfield, Mass.	36	23	6	3	1	3	4
Waterbury, Conn.	36	29	3	4	-	-	6
Worcester, Mass.	48	35	9	3	-	1	6
MID. ATLANTIC	1,831	1,286	370	113	40	22	82
Albany, N.Y.	59	46	9	3	-	1	4
Allentown, Pa.	18	16	2	-	-	-	-
Buffalo, N.Y.	56	42	11	1	1	1	7
Camden, N.J.	22	16	3	2	1	-	3
Elizabeth, N.J.	16	14	2	-	-	-	-
Erie, Pa.	34	24	6	2	2	-	3
Jersey City, N.J.	34	26	5	3	-	-	-
New York City, N.Y.	1,049	755	209	59	19	7	37
Newark, N.J.	42	22	12	6	2	-	2
Paterson, N.J.	17	7	7	1	-	2	1
Philadelphia, Pa.	253	147	66	26	9	5	8
Pittsburgh, Pa.§	15	9	5	1	-	-	-
Reading, Pa.	20	16	3	1	-	-	3
Rochester, N.Y.	U	U	U	U	U	U	U
Schenectady, N.Y.	27	20	5	1	1	-	3
Scranton, Pa.	31	23	6	-	2	-	1
Syracuse, N.Y.	99	74	14	4	2	5	7
Trenton, N.J.	17	13	3	-	-	1	1
Utica, N.Y.	22	16	2	3	1	-	2
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	1,585	1,064	313	101	48	59	95
Akron, Ohio	51	31	8	6	1	5	1
Canton, Ohio	40	29	7	-	3	1	4
Chicago, Ill.	U	U	U	U	U	U	U
Cincinnati, Ohio	71	49	14	4	2	2	10
Cleveland, Ohio	154	97	37	12	1	7	4
Columbus, Ohio	188	128	34	15	7	4	10
Dayton, Ohio	136	96	28	6	4	2	11
Detroit, Mich.	182	99	49	13	6	15	12
Evansville, Ind.	34	30	3	-	-	1	-
Fort Wayne, Ind.	72	47	16	4	4	1	2
Gary, Ind.	16	10	3	2	1	-	-
Grand Rapids, Mich.	39	33	3	2	1	-	7
Indianapolis, Ind.	183	114	39	13	7	10	16
Lansing, Mich.	49	38	7	-	1	3	2
Milwaukee, Wis.	115	71	25	11	4	4	6
Peoria, Ill.	39	31	4	-	1	3	4
Rockford, Ill.	44	36	6	-	2	-	3
South Bend, Ind.	31	25	3	3	-	-	2
Toledo, Ohio	79	57	14	5	2	1	-
Youngstown, Ohio	62	43	13	5	1	-	1
W.N. CENTRAL	544	373	100	36	22	13	42
Des Moines, Iowa	57	43	8	3	1	2	4
Duluth, Minn.	38	30	4	2	-	2	5
Kansas City, Kans.	26	19	4	3	-	-	1
Kansas City, Mo.	86	47	23	10	4	2	3
Lincoln, Nebr.	45	31	11	-	3	-	4
Minneapolis, Minn.	80	49	16	5	5	5	4
Omaha, Nebr.	82	66	10	3	2	1	16
St. Louis, Mo.	U	U	U	U	U	U	U
St. Paul, Minn.	50	38	8	3	1	-	4
Wichita, Kans.	80	50	16	7	6	1	1
S. ATLANTIC	1,269	768	296	114	46	42	65
Atlanta, Ga.	140	71	42	19	7	1	6
Baltimore, Md.	150	90	40	11	5	4	13
Charlotte, N.C.	125	90	18	12	2	3	11
Jacksonville, Fla.	143	93	31	11	3	5	8
Miami, Fla.	45	29	10	5	-	1	3
Norfolk, Va.	46	26	7	4	6	3	1
Richmond, Va.	57	28	20	6	2	1	3
Savannah, Ga.	U	U	U	U	U	U	U
St. Petersburg, Fla.	67	45	12	4	3	3	1
Tampa, Fla.	186	122	40	14	1	9	12
Washington, D.C.	299	167	72	28	17	12	4
Wilmington, Del.	11	7	4	-	-	-	3
E.S. CENTRAL	669	464	131	45	18	11	57
Birmingham, Ala.	144	101	28	6	5	4	14
Chattanooga, Tenn.	86	55	18	6	5	2	6
Knoxville, Tenn.	91	68	15	6	2	-	8
Lexington, Ky.	77	53	17	5	1	1	3
Memphis, Tenn.	U	U	U	U	U	U	U
Mobile, Ala.	71	49	16	4	1	1	2
Montgomery, Ala.	42	31	7	2	2	-	9
Nashville, Tenn.	158	107	30	16	2	3	15
W.S. CENTRAL	1,443	893	320	119	56	55	88
Austin, Tex.	76	41	18	6	9	2	3
Baton Rouge, La.	72	38	22	11	1	-	1
Corpus Christi, Tex.	50	36	8	2	2	2	3
Dallas, Tex.	181	102	44	16	8	11	13
El Paso, Tex.	79	53	18	7	1	-	2
Ft. Worth, Tex.	121	79	26	6	5	5	10
Houston, Tex.	352	203	82	39	11	17	30
Little Rock, Ark.	68	38	17	3	5	5	-
New Orleans, La.	U	U	U	U	U	U	U
San Antonio, Tex.	203	145	34	14	5	5	12
Shreveport, La.	91	65	16	3	2	5	9
Tulsa, Okla.	150	93	35	12	7	3	5
MOUNTAIN	833	594	158	48	16	17	59
Albuquerque, N.M.	120	83	25	6	4	2	8
Boise, Idaho	39	25	10	2	2	-	-
Colo. Springs, Colo.	51	41	5	1	2	2	5
Denver, Colo.	85	59	14	6	4	2	3
Las Vegas, Nev.	210	135	55	14	1	5	15
Ogden, Utah	29	23	5	1	-	-	2
Phoenix, Ariz.	U	U	U	U	U	U	U
Pueblo, Colo.	28	19	8	1	-	-	-
Salt Lake City, Utah	142	108	22	8	3	1	15
Tucson, Ariz.	129	101	14	9	-	5	11
PACIFIC	1,597	1,116	302	120	34	25	87
Berkeley, Calif.	16	13	1	1	-	1	-
Fresno, Calif.	79	59	15	2	3	-	7
Glendale, Calif.	13	10	1	2	-	-	-
Honolulu, Hawaii	79	56	13	2	5	3	1
Long Beach, Calif.	65	41	16	6	1	1	8
Los Angeles, Calif.	411	295	68	34	10	4	-
Pasadena, Calif.	18	11	4	2	-	1	3
Portland, Oreg.	91	63	18	7	2	1	6
Sacramento, Calif.	170	115	38	10	5	2	17
San Diego, Calif.	163	112	34	11	2	4	13
San Francisco, Calif.	U	U	U	U	U	U	U
San Jose, Calif.	184	128	31	18	3	4	19
Santa Cruz, Calif.	34	24	8	2	-	-	3
Seattle, Wash.	110	73	23	13	1	-	3
Spokane, Wash.	49	34	9	3	1	2	3
Tacoma, Wash.	115	82	23	7	1	2	4
TOTAL	10,260¶	6,894	2,098	727	288	249	621

U: Unavailable. -:No reported cases.

* Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of ≥100,000. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

† Pneumonia and influenza.

§ Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

¶ Total includes unknown ages.

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